

True Translation of PCT/EP03/00379 claims as amended under Article 19

10/517276

Amended Claims

Filed with the International Office on July 04, 2003. Original claims 1-10 replaced by amended claims 1-3 (2 pages)

1. Machine for superfinishing tools through honing or precision grinding comprising a honing spindle which is disposed in a spindle housing and can be driven by an electromotor and whose stroke motion is effected by a linear motor whose moving part bears the spindle housing, and wherein a bar is disposed in the honing spindle which also rotates and can be axially displaced therein by a servomotor for widening a honing tool disposed on the honing spindle or as carrier of a grinding body, characterized in that the electromotor (9) is formed by a stator (25) which is integrated in the spindle housing, and a rotor (26) which can be rotated in the stator (25) in which the honing spindle (7) is disposed and the servomotor (10) is coaxially flanged to the end of the spindle housing (8).
2. Machine according to claim 1, characterized in that the driven shaft (50) of the servomotor (10) engages in a coupling piece (49) and rotates same, the coupling piece (49) comprising a plunger (47) provided with an outer thread (56') which engages in the inner thread (56) of an adjusting sleeve (53) which is axially displaced upon rotation of the coupling piece (49) due to engagement of the two threads (56, 56') and to which a further sleeve (52) is connected for axial displacement within the transmission housing (51) without rotating, wherein a connecting rod (110) which can be connected to said bar (10) is rotatably disposed in said sleeve (52).
3. Machine according to claim 2, characterized in that the delivery means comprises a linear motor (200) whose runner and stator are

round, wherein the runner is disposed in the stator and is connected to said sleeve (22).